

WHAT IS CLAIMED IS:

1. A leak-resistant hinged polymeric foam container, comprising:
a base comprising a bottom wall and a sidewall encompassing and
extending generally upwardly from the bottom wall, the sidewall comprising a first
5 sealing area and a first generally upwardly projecting wall, the first sealing area including
a first generally outwardly projecting ledge, a second generally outwardly projecting
ledge, and a second generally upwardly projecting wall, the second generally upwardly
projecting wall encompassing and extending generally upwardly from the second
generally outwardly projecting ledge, the first generally outwardly projecting ledge
10 encompassing and extending generally outwardly from the second generally upwardly
projecting wall, the first generally upwardly projecting wall encompassing and extending
generally upwardly from the first generally outwardly projecting ledge;
a hinge being connected to the base; and
a lid being hingedly connected to the base by the hinge, the lid being
15 adapted to be pivoted about the hinge to engage the base upon closure of the container,
the lid including a second sealing area that is adapted to engage the first sealing area
upon securing the lid and the base,
wherein the container forms locking means for securing the lid and the
base and wherein the base comprises a polymeric foam and the lid comprises a
20 polymeric foam.
2. The container of claim 1, wherein the hinge is connected to the first
generally upwardly projecting wall of the base.
3. The container of claim 1, wherein the first and second sealing areas are
continuous.
- 25 4. The container of claim 3, wherein the first sealing area and the second
sealing area are spaced from the hinge to allow an uninterrupted seal between the first
and second continuous sealing areas upon securing the lid and the base.
5. The container of claim 1, wherein the second sealing area includes a first
generally outwardly projecting surface, a second generally outwardly projecting surface,
30 and a first generally upwardly projecting wall, the first generally upwardly projecting

wall encompasses and bridges the first and second generally outwardly projecting surfaces.

6. The container of claim 5, wherein the first generally upwardly projecting wall of the second sealing area forms an extension, the second generally upwardly projecting wall forms a recess therein, the extension is adapted to fit into the recess.

7. The container of claim 1, wherein the first generally outwardly projecting ledge is generally horizontal, the second generally outwardly projecting ledge is generally horizontal, and the second generally upwardly projecting wall is generally vertical.

8. The container of claim 1, wherein locking means is at least one undercut, slot and tab closures, a continuous undercut ring, a discontinuous undercut ring or combinations thereof.

9. The container of claim 1, wherein the container has a recessed portion and a raised portion that is adapted to correspond to the recessed portion of a second container so as to assist in stacking a plurality of the containers.

10. The container of claim 1, wherein the base further including a tab extension to assist in opening and closing the container, the tab extension encompasses and extends outwardly from the first generally upwardly projecting wall of the base.

11. The container of claim 1, wherein the lid further includes a tab extension to assist in opening the container.

12. The container of claim 1, wherein the lid further includes at least one indentation located generally opposite of the hinge to assist in opening the container from a closed position.

13. The container of claim 1, wherein a portion of the hinge extends downwardly towards the bottom wall.

14. The container of claim 13, wherein the portion of the hinge extends at least 1/4 of an inch below an upper edge of the first generally upwardly extending wall.

15. The container of claim 1, wherein the first generally upwardly projecting wall is generally vertical.

16. The container of claim 1, wherein the polymeric foam container comprises an alkenyl aromatic polymer.

17. The container of claim 1, wherein the container is generally circular and the diameter of the second sealing area is greater than the diameter of the first sealing area.

18. The container of claim 1, wherein the container is generally circular and
5 diameter of the second sealing area is the same as the diameter of the first sealing area.

19. The container of claim 1, wherein the first generally upwardly projecting wall forms locking means for securing the lid and the base.

20. A leak-resistant polymeric foam container, comprising:
a base comprising a bottom wall and a sidewall encompassing and
10 extending generally upwardly from the bottom wall, the sidewall comprising a first sealing area and a first generally upwardly projecting wall, the first sealing area including a first generally outwardly projecting ledge, a second generally outwardly projecting ledge, and a second generally upwardly projecting wall, the second generally upwardly projecting wall encompassing and extending generally upwardly from the second
15 generally outwardly projecting ledge, the first generally outwardly projecting ledge encompassing and extending generally outwardly from the second generally upwardly projecting wall, the first generally upwardly projecting wall encompassing and extending generally upwardly from the first generally outwardly projecting ledge; and

a lid being configured to mate with the base to form a closed position, the
20 lid including a second sealing area that is adapted to engage the first sealing area upon securing the lid and the base to form the closed position,

wherein the container forms locking means for securing the lid and the base and wherein the base comprises a polymeric foam and the lid comprises a polymeric foam.

21. The container of claim 20, wherein the first and second sealing areas are
25 continuous.

22. The container of claim 20, wherein the second sealing area includes a first generally outwardly projecting surface, a second generally outwardly projecting surface, and a first generally upwardly projecting wall, the first generally upwardly projecting
30 wall encompasses and bridges the first and second generally outwardly projecting surfaces.

23. The container of claim 22, wherein the first generally upwardly projecting wall of the second sealing area forms an extension, the second generally upwardly projecting wall forms a recess therein, the extension is adapted to fit into the recess.

24. The container of claim 20, wherein the first generally outwardly
5 projecting ledge is generally horizontal, the second generally outwardly projecting ledge is generally horizontal, and the second generally upwardly projecting wall is generally vertical.

25. The container of claim 20, wherein locking means is at least one undercut, slot and tab closures, a continuous undercut ring, a discontinuous undercut ring or
10 combinations thereof.

26. The container of claim 20, wherein the container has a recessed portion and a raised portion that is adapted to correspond to the recessed portion of a second container so as to assist in stacking a plurality of the containers.

27. The container of claim 20, wherein the base further including a tab
15 extension to assist in opening and closing the container, the tab extension encompasses and extends outwardly from the first generally upwardly projecting wall of the base.

28. The container of claim 20, wherein the lid further includes a tab extension to assist in opening the container.

29. The container of claim 20, wherein the lid further includes at least one
20 indentation located generally opposite of the hinge to assist in opening the container from a closed position.

30. The container of claim 20, wherein the first generally upwardly projecting wall is generally vertical.

31. The container of claim 20, wherein the polymeric foam container
25 comprises an alkenyl aromatic polymer.

32. The container of claim 20, wherein the container is generally circular.

33. The container of claim 20, wherein the first generally upwardly projecting wall forms locking means for securing the lid and the base.

34. A leak-resistant hinged polymeric foam container, comprising:

a base comprising a bottom wall and a sidewall encompassing and extending generally upwardly from the bottom wall, the sidewall comprising a first sealing area and a first generally upwardly projecting wall;

a hinge being connected to the base, the hinge when in a closed position comprising a first generally horizontal portion, a second generally horizontal portion, and a first generally vertical portion that are integrally connected to each other, the second generally horizontal portion being folded over the first generally horizontal portion, the first generally vertical portion extending generally downwardly from the second generally horizontal portion towards the bottom wall; and

a lid being hingedly connected to the base by the hinge, the lid being adapted to be pivoted about the hinge to engage the base upon closure of the container, the lid including a second sealing area that is adapted to engage the first sealing area upon securing the lid and the base,

wherein the container forms locking means for securing the lid and the base and wherein the base comprises a polymeric foam and the lid comprises a polymeric foam.

35. The container of claim 34, wherein the first sealing area of the base includes a second generally upwardly projecting wall and a first generally outwardly projecting ledge, the second generally upwardly projecting wall encompasses the first generally outwardly projecting ledge.

36. The container of claim 35, wherein the second generally upwardly projecting wall extends downwardly from the first generally outwardly projecting ledge towards the bottom wall.

37. The container of claim 35, wherein the second generally upwardly projecting wall extends upwardly from the first generally outwardly projecting ledge.

38. The container of claim 34, wherein locking means is at least one undercut, slot and tab closures, a continuous undercut ring, a discontinuous undercut ring or combinations thereof.

39. The container of claim 34, wherein the container has a recessed portion and a raised portion that is adapted to correspond to the recessed portion of a second container so as to assist in stacking a plurality of the containers.

40. The container of claim 34, wherein the first generally upwardly projecting wall is generally vertical.

41. The container of claim 34, wherein the polymeric foam container comprises an alkenyl aromatic polymer.

5 42. The container of claim 34, wherein the first generally upwardly projecting wall forms locking means for securing the lid and the base.

43. A leak-resistant hinged polymeric foam container, comprising:
a base comprising a bottom wall and a sidewall encompassing and
extending generally upwardly from the bottom wall, the sidewall comprising a first
10 sealing area and a first generally upwardly projecting wall, the first sealing area including
a first generally outwardly projecting ledge, a second generally outwardly projecting
ledge, and a second generally upwardly projecting wall, the second generally upwardly
projecting wall encompassing and extending generally upwardly from the second
generally outwardly projecting ledge, the first generally outwardly projecting ledge
15 encompassing and extending generally outwardly from the second generally upwardly
projecting wall, the first generally upwardly projecting wall encompassing and extending
generally upwardly from the first generally outwardly projecting ledge;

a hinge being connected to the base; and
a lid being hingedly connected to the base by the hinge, the lid being
20 adapted to be pivoted about the hinge to engage the base upon closure of the container,
the lid including a second sealing area that is adapted to engage the first sealing area
upon securing the lid and the base,

wherein the first generally upwardly projecting wall forms at least one
undercut that extends over the second sealing area of the lid upon securing the lid and
25 the base, and wherein the base comprises a polymeric foam and the lid comprises a
polymeric foam.

44. The container of claim 43, wherein the first generally upwardly projecting wall forms a plurality of undercuts.

45. The container of claim 43, wherein the first generally outwardly
30 projecting ledge is generally horizontal, the second generally outwardly projecting ledge

is generally horizontal, and the second generally upwardly projecting wall is generally vertical.

46. The container of claim 43, wherein the first generally upwardly projecting wall is generally vertical.

5 47. A leak-resistant polymeric foam container, comprising:
a base comprising a bottom wall and a sidewall encompassing and
extending generally upwardly from the bottom wall, the sidewall comprising a first
sealing area and a first generally upwardly projecting wall, the first sealing area including
a first generally outwardly projecting ledge, a second generally outwardly projecting
10 ledge, and a second generally upwardly projecting wall, the second generally upwardly
projecting wall encompassing and extending generally upwardly from the second
generally outwardly projecting ledge, the first generally outwardly projecting ledge
encompassing and extending generally outwardly from the second generally upwardly
projecting wall, the first generally upwardly projecting wall encompassing and extending
15 generally upwardly from the first generally outwardly projecting ledge; and
a lid being configured to mate with the base to form a closed position, the
lid including a second sealing area that is adapted to engage the first sealing area upon
securing the lid and the base to form the closed position,
wherein the first generally upwardly projecting wall forms at least one
20 undercut that extends over the second sealing area of the lid upon securing the lid and
the base, and wherein the base comprises a polymeric foam and the lid comprises a
polymeric foam.

48. The container of claim 47, wherein the first generally upwardly projecting wall forms a plurality of undercuts.

25 49. The container of claim 47, wherein the first generally outwardly
projecting ledge is generally horizontal, the second generally outwardly projecting ledge
is generally horizontal, and the second generally upwardly projecting wall is generally
vertical.

50. The container of claim 47, wherein the first generally upwardly projecting
30 wall is generally vertical.

51. A leak-resistant hinged polymeric foam container, comprising:

a base comprising a bottom wall and a sidewall encompassing and extending generally upwardly from the bottom wall, the sidewall comprising a first sealing area and a first generally upwardly projecting wall;

a hinge being connected to the base, the hinge when in a closed position comprising a first generally horizontal portion, a second generally horizontal portion, and a first generally vertical portion that are integrally connected to each other, the second generally horizontal portion being folded over the first generally horizontal portion, the first generally vertical portion extending generally downwardly from the second generally horizontal portion towards the bottom wall; and

a lid being hingedly connected to the base by the hinge, the lid being adapted to be pivoted about the hinge to engage the base upon closure of the container, the lid including a second sealing area that is adapted to engage the first sealing area upon securing the lid and the base,

wherein the first generally upwardly projecting wall forms at least one undercut that extends over the second sealing area of the lid upon securing the lid and the base, and wherein the base comprises a polymeric foam and the lid comprises a polymeric foam.

52. The container of claim 51, wherein the first generally upwardly projecting wall forms a plurality of undercuts.

53. The container of claim 51, wherein the first generally outwardly projecting ledge is generally horizontal, the second generally outwardly projecting ledge is generally horizontal, and the second generally upwardly projecting wall is generally vertical.

54. The container of claim 51, wherein the first generally upwardly projecting wall is generally vertical.

55. A leak-resistant hinged polymeric foam container, comprising:
a base comprising a bottom wall and a sidewall encompassing and extending generally upwardly from the bottom wall, the sidewall comprising a first sealing area and a first generally upwardly projecting wall, the first sealing area including a first generally outwardly projecting ledge, a second generally outwardly projecting ledge, and a second generally upwardly projecting wall, the second generally upwardly

projecting wall encompassing and extending generally upwardly from the second generally outwardly projecting ledge, the first generally outwardly projecting ledge encompassing and extending generally outwardly from the second generally upwardly projecting wall, the first generally upwardly projecting wall encompassing and extending generally upwardly from the first generally outwardly projecting ledge;

a hinge being connected to the base, the hinge when in a closed position comprising a first generally horizontal portion, a second generally horizontal portion, and a first generally vertical portion that are integrally connected to each other, the second generally horizontal portion being folded over the first generally horizontal portion, the first generally vertical portion extending downwardly from the second generally horizontal portion towards the bottom wall; and

a lid being hingedly connected to the base by the hinge, the lid being adapted to be pivoted about the hinge to engage the base upon closure of the container, the lid including a second sealing area that is adapted to engage the first sealing area upon securing the lid and the base;

wherein the first generally upwardly projecting wall forms at least one undercut that extends over the second sealing area of the lid upon securing the lid and the base, and wherein the base comprises a polymeric foam and the lid comprises a polymeric foam.

56. A leak-resistant hinged polymeric foam container, comprising:

a base comprising a bottom wall and a sidewall encompassing and extending generally upwardly from the bottom wall, the sidewall comprising a first sealing area and a first generally upwardly projecting wall, the first sealing area including a first generally outwardly projecting ledge and a second generally upwardly projecting wall, the second generally upwardly projecting wall encompassing the first generally outwardly projecting ledge, the first generally upwardly projecting wall encompassing and extending generally upwardly from the first sealing area;

a hinge being connected to the base; and

a lid being hingedly connected to the base by the hinge, the lid being adapted to be pivoted about the hinge to engage the base upon closure of the container, the lid including a second sealing area that is adapted to engage the first sealing area of

the base upon securing the lid and the base, the second sealing area including a first generally outwardly projecting surface and a first generally upwardly projecting wall, the first generally upwardly projecting wall of the lid encompassing the first generally outwardly projecting surface,

5 wherein one of the first sealing area and the second sealing area forms a projection and the other one of the first sealing area and the second sealing area forms a corresponding recess for securing the lid and the base and wherein the base comprises a polymeric foam and the lid comprises a polymeric foam.

57. The container of claim 56, wherein the first sealing area forms the recess
10 and the second sealing area forms the projection.

58. The container of claim 56, wherein the second generally upwardly projecting wall of the first sealing area forms the recess and the first generally upwardly projecting wall of the second sealing area forms the projection.

59. The container of claim 56, wherein the first sealing area further including
15 a second generally outwardly projecting ledge, the second generally upwardly projecting wall encompassing and extending generally upwardly from the second generally outwardly projecting ledge, the first generally outwardly projecting ledge encompassing and extending generally outwardly from the second generally upwardly projecting wall, the first generally upwardly projecting wall encompassing and extending generally
20 upwardly from the first generally outwardly projecting ledge.

60. The container of claim 56, wherein the second generally upwardly projecting wall extends generally upwardly from the first generally outwardly projecting ledge.

61. A leak-resistant polymeric foam container, comprising:
25 a base comprising a bottom wall and a sidewall encompassing and extending generally upwardly from the bottom wall, the sidewall comprising a first sealing area and a first generally upwardly projecting wall, the first sealing area including a first generally outwardly projecting ledge and a second generally upwardly projecting wall, the second generally upwardly projecting wall encompassing the first generally
30 outwardly projecting ledge, the first generally upwardly projecting wall encompassing and extending generally upwardly from the first sealing area;

a lid being configured to mate with the base to form a closed position, the lid including a second sealing area that is adapted to engage the first sealing area of the base upon securing the lid and the base, the second sealing area including a first generally outwardly projecting surface and a first generally upwardly projecting wall, the first generally upwardly projecting wall of the lid encompassing the first generally outwardly projecting surface,

wherein one of the first sealing area and the second sealing area forms a projection and the other one of the first sealing area and the second sealing area forms a corresponding recess for securing the lid and the base and wherein the base comprises a polymeric foam and the lid comprises a polymeric foam.

62. The container of claim 61, wherein the first sealing area forms the recess and the second sealing area forms the projection.

63. The container of claim 61, wherein the second generally upwardly projecting wall of the first sealing area forms the recess and the first generally upwardly projecting wall of the second sealing area forms the projection.

64. The container of claim 61, wherein the first sealing area further including a second generally outwardly projecting ledge, the second generally upwardly projecting wall encompassing and extending generally upwardly from the second generally outwardly projecting ledge, the first generally outwardly projecting ledge encompassing and extending generally outwardly from the second generally upwardly projecting wall, the first generally upwardly projecting wall encompassing and extending generally upwardly from the first generally outwardly projecting ledge.

65. The container of claim 61, wherein the second generally upwardly projecting wall extends generally upwardly from the first generally outwardly projecting ledge.

66. A leak-resistant hinged polymeric foam container, comprising:
a base comprising a bottom wall and a sidewall encompassing and extending generally upwardly from the bottom wall, the sidewall comprising a first sealing area and a first generally upwardly projecting wall;

a hinge being connected to the base, the hinge when in a closed position comprising a first generally horizontal portion, a second generally horizontal portion, and

a first generally vertical portion that are integrally connected to each other, the second generally horizontal portion being folded over the first generally horizontal portion, the first generally vertical portion extending downwardly from the second generally horizontal portion towards the bottom wall; and

5 a lid being hingedly connected to the base by the hinge, the lid being adapted to be pivoted about the hinge to engage the base upon closure of the container, the lid including a second sealing area that is adapted to engage the first sealing area upon securing the lid and the base,

 wherein one of the first sealing area and the second sealing area forms a
10 projection and the other one of the first sealing area and the second sealing area forms a corresponding recess for securing the lid and the base and wherein the base comprises a polymeric foam and the lid comprises a polymeric foam.

67. The container of claim 66, wherein the first sealing area forms the recess and the second sealing area forms the projection.

15 68. The container of claim 66, wherein the first sealing area further including forms a second generally outwardly projecting ledge, the second generally upwardly projecting wall encompassing and extending generally upwardly from the second generally outwardly projecting ledge, the first generally outwardly projecting ledge encompassing and extending generally outwardly from the second generally upwardly
20 projecting wall, the first generally upwardly projecting wall encompassing and extending generally upwardly from the first generally outwardly projecting ledge.

69. The container of claim 66, wherein the second generally upwardly projecting wall extends generally upwardly from the first generally outwardly projecting ledge.

25 70. A method of forming a foam polymeric container comprising:
 providing a foamable resin in an extruder;
 melting the foamable resin in the extruder;
 extruding the foamable resin from the extruder to form an extruded material; and
 thermoforming the extruded material into a container, the container comprising a
30 base and a lid, the base comprising a bottom wall and a sidewall encompassing and extending generally upwardly from the bottom wall, the sidewall comprising a first

sealing area and a first generally upwardly projecting wall, the first sealing area including a first generally outwardly projecting ledge, a second generally outwardly projecting ledge, and a second generally upwardly projecting wall, the second generally upwardly projecting wall encompassing and extending generally upwardly from the second
 5 generally outwardly projecting ledge, the first generally outwardly projecting ledge encompassing and extending generally outwardly from the second generally upwardly projecting wall, the first generally upwardly projecting wall encompassing and extending generally upwardly from the first generally outwardly projecting ledge, the lid being configured to mate with the base to form a closed position, the lid including a second
 10 sealing area that is adapted to engage the first sealing area upon securing the lid and the base, and wherein the container forms locking means for securing the lid and the base.

71. The method of claim 70 further comprising a hinge that is connected to the base, the lid is hingedly connected to the base by the hinge, the lid is adapted to be pivoted about the hinge to engage the base upon closure of the container.

72. The method of claim 70, wherein the first generally upwardly projecting wall forms locking means for securing the lid and the base.

73. A method of forming a foam polymeric container comprising:
 providing a foamable resin in an extruder;
 melting the foamable resin in the extruder;
 20 extruding the foamable resin from the extruder to form an extruded material; and
 thermoforming the extruded material into a container, comprising a base and a lid, the base comprising a bottom wall and a sidewall encompassing and extending generally upwardly from the bottom wall, the sidewall comprising a first sealing area and a first generally upwardly projecting wall, the first sealing area including a first generally
 25 outwardly projecting ledge and a second generally upwardly projecting wall, the second generally upwardly projecting wall encompassing the first generally outwardly projecting ledge, the first generally upwardly projecting wall encompassing and extending generally upwardly from the first sealing area, the lid being configured to mate with the base to form a closed position, the lid including a second sealing area that is adapted to engage
 30 the first sealing area of the base upon securing the lid and the base, the second sealing area including a first generally outwardly projecting surface and a first generally

upwardly projecting wall, the first generally upwardly projecting wall of the lid encompassing the first generally outwardly projecting surface, and wherein one of the first sealing area and the second sealing area forms a projection and the other one of the first sealing area and the second sealing area forms a corresponding recess for securing
5 the lid and the base.

74. The method of claim 73 further comprising a hinge that is connected to the base, the lid is hingedly connected to the base by the hinge, the lid is adapted to be pivoted about the hinge to engage the base upon closure of the container.